

## 151. LAPAROSCOPIC CHOLECYSTECTOMY AND PERMISSIVE HYPERCAPNIC VENTILATION ANESTHESIA: PROSPECTIVE, RANDOMIZED STUDY

Victoria Rusu, Adrian Belii

*Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Background.** Hipercapnic ventilation during general anesthesia was a disputed topic for researchers during last ten years. However there were observed potential beneficial effects of induced mild hypercapnia during the anesthesia on intraoperative and postoperative outcome: lower necessity in opioids, reducing the rate of wound infections,, accelerated wound healing.

**AIM.** Estimation of the effects of intraoperative induced mild hypercapnia (ETCO<sub>2</sub>=45-50 mmHg), on postoperative recovery after laparoscopic colecistectomy.

**Materials and methods.** Prospective randomized study (normocapnic lot, n=42; hypercapnic lot, n=58), written informed consent. Positive agreement of Ethics Committee. Anesthesia: induction – propofol, fentanyl, maintenance – sevofluran, relaxants – tracrium. Statistics: t-Student, Fisher exact test, Mantel-Cox test and ANOVA.

**Results.** Similar lots in terms of age, BMI, ASA, surgery and hospitalization period. Hypercapnic lot vs. normocapnic lot: length of awakening from anesthesia – median, 15 vs. 20 min ( $\chi^2=12,6$ ;  $p<0,0001$ ); postoperative ileus period – median, 28 vs. 30 hours ( $\chi^2=10,8$ ;  $p=0,001$ ); PONV risk, in favor of hypercapnic lot – OR=0,50 (95CI=0,24-1,05),  $p=0.0695$ . Neurocognitive tests (DCT, DSST, Wechsler, Stroop), similar results for both lots and for the pre and postoperative periods. Study limits: reduced sample, short period of surgery, mild hypercapnia.

**Conclusions:** The results of our research show a reduced period of awake after anesthesia, also a reduced period of ileus, and a minimized PONV risk, after laparoscopic cholecystectomy with induced mild hipercapnia with no hemodynamic and neurocognitive side effects.

**Keywords:** induced hypercapnia, intraanesthetic, postoperative recovery.

## 152. BARIATRIC SURGERY IN A TERTIARY CENTER- ANALYSIS OF AN INITIAL EXPERIENCE (2010-2013)

Crisitan Vintila, Calin-Traian Suta, Nicolae Stanciu, Asmaa Carla Barmou

Scientific adviser: Radu Mircea Neagoe, Associate Professor, University of Medicine and Pharmacy Targu Mures, Romania

**Introduction:** Obesity has increased alarmingly in modern society in particular in more developed countries and it also becomes more common in Eastern-European countries. In order to treat it efficiently, bariatric surgery developed as a stand-alone specialty. In this study we analyze the first 30 patients who underwent laparoscopic sleeve gastrectomy (LSG) in our clinic and follow their evolution on a period of 1 year.